18. (AS NEW HEREIN) The detachable connector unit of claim 17, wherein:
each fastening shaft has a screw thread on at least a first portion thereof projecting from
the front surface of the housing and an integral second portion extending into the fasteners; and
the fastener receives the second portion of the fastening shaft, resiliently biasing same
to normally project from the front surface of the housing and to be retracted therein, within a
limited extent of axial movement of the fastening shaft.

- 19. (AS NEW HEREIN) The detachable connector unit of claim 18, wherein each fastening shaft furthermore has an enlarged disk disposed thereon, of a diameter greater than the diameter of the shaft and disposed so as to render an arcuate portion of the disk accessible through an opening in the respective end wall of the housing for manual rotation by an operator.
- 20. (AS NEW HEREIN) The detachable connector unit of claim 18, wherein:
  each mating fastener is a mating, female threaded unit receiving the threaded end of the respective fastening shaft.

## **REMARKS**

In accordance with the foregoing, the specification has been amended to correct a typographical error and, further, to clarify the description of structural elements of the specification corresponding to claim recitations. In addition, claims 6 and 8 have been canceled and the independent claims 1, 3 and 7 have been amended to clarify salient features of the invention and, moreover, the respective dependent claims of these independent and respective claims have been amended for consistent antecedent support. Furthermore, new independent claims, reciting a combination of an electronic apparatus and a detachable connector in accordance with the invention (see, e.g., Figs. 1, 2A and 2B) and based on the now pending independent claims, and respective dependent claims have been added.

No new matter is presented by any of the foregoing and, accordingly, approval and entry of the specification and claim amendments and of the new claims are respectfully requested.

ITEM 2: REJECTION OF CLAIMS 1-11 FOR OBVIOUSNESS UNDER 35 USC § 103(a) OVER HERRON ET AL. IN VIEW OF RACZYNSKI

09/988,161

The rejections of the pending claims on the above grounds are respectfully traversed.

Herron et al. discloses a computer apparatus 10 and a docking module 18 connectable to the computer apparatus 10. The docking module 18 has a plurality of connectors. However, Herron et al. does not disclose a feature of a fastener of the detachable connector unit of the present invention, as the Examiner concedes at page 2 of the Office Action, the last two lines.

Raczynski discloses equipment 21 having a socket 31 mounted on a wall thereof, and a cable 59 terminating in a plug 41 connectable to the socket 31. The plug 41 includes two male connector elements 91, two pulleys 81 in which the male elements 91 are engaged at first ends thereof, and a toothed belt 62 surrounding and engaging teeth 82 on the peripheral surfaces of the two pulleys 81. The two male elements 91 are urged by springs 88 to project from the plug 41. In order to connect the plug 41 to the socket 31, the user operates the belt 62 so as to simultaneously rotate the two male elements 91.

The plug 41 is asserted to correspond to one of the "first connectors" of the present invention, and the two male elements 91, to a pair of fastener units as recited in the claims herein. In Raczynski, however, only a single plug (connector) 41 exists between the two male elements (fastener units) 91, and the belt 62 is used to rotate the pulleys 81 to operate the two male elements 91 in synchronism. The distance between the two male elements 91 is small, since only a single plug 41 is encompassed therebetween, and which small distance appears essential to enable the synchronous operation of the two male elements 91. Further, the plug 41 is to engage the socket 31 which has a width dimension less than the thickness dimension of the equipment 21, as is readily seen in Fig. 1 of the reference.

In the present invention, as claimed, a plurality of first connectors exists between the pair of fastener units and thus the distance between the pair of fasteners is far greater than the distance between the threaded shaft fasteners 91 of Raczynski. Moreover, the length of the housing with the fasteners therein is substantially equal to the overall length of the detachable connector unit and, as set forth more particularly in the new independent claims 12, 14 and 17 is of a corresponding width to that of the housing of the electronic apparatus.

Under the circumstances, it appears doubtful that the connector of Raczynski, which is intended to enable rotation of both fasteners by a one hand operation through manipulation of the belt 62, would not be desirable--and very likely not possible--for adaptation in the structure of Herron et al. Hence, *prima facie* obviousness of the combination is lacking. Moreover, the Raczynski structure is contrary to the claim recitation of all independent claims, in that the pair

of fasteners in accordance with the present invention are operable <u>independently</u> of each other. Hence, Raczynski is a "teaching-away" from the claimed invention herein.

# **CONCLUSION**

There being no other objections or rejections, it is submitted that the application is in condition for allowance, which action is earnestly solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: December 31, 2002

зу: \_\_\_\_

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**CERTIFICATE UNDER 37 CFR 1.8(a)** 

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents-and Trademarks, Washington, D.C. 20231

STAAS & HALSEY

By:\_\_\_\_ Date :\_\_

### **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

#### IN THE SPECIFICATION:

Please AMEND paragraph [0010], as follows:

Preferably, coupling means is provided to transmit electrical power from the battery unit to the information apparatus body. Also, preferably, at least one fastener unit is mounted between the information apparatus body and the connector unit for a mechanical detachable fixation therebetween. Preferably, the connector unit is mechanically detachably fixed to the information apparatus body through said at least one [faster] <u>fastener</u>. Also, preferably, the connector unit and the battery unit are alternatively detachably fixed to the back side of the information apparatus body.

Please AMEND paragraph [0029], as follows:

During the attachment of the connector box 53 to the personal computer 1 (i.e., to the lower housing 5), the connector section 55, provided on the front surface of the connector box 53, is engaged with the common connector 51 on the rear surface of the personal computer 1 so that the rear surface of the personal computer 1 and the front surface of the connector box 53 are wholly or substantially brought into surface-contact with each other. At this time, the threaded rods, or shafts, 63 projected from the respective sides of the front surface of the connector box 53 just confront female threaded sections (fastening sections) 77 (see Fig. 2B) provided at corresponding positions on the rear surface of the personal computer 1. More specifically, the thread section of the threaded rod 63 is pushed into the main body 65 against a biasing force of the compression coil spring 67 in the main body 65 of the fastener 61, while being fittingly in contact with the female thread section 77 (that is, while maintaining a state to be easily engageable with the female thread 30 section 77).

# IN THE CLAIMS:

Please CANCEL claims 6 and 8.

Please AMEND the following claims:

1. (ONCE AMENDED) A detachable connector unit for an electronic apparatus comprising:

a housing;

a plurality of first connectors mounted in the housing affording connections to respective peripheral units;

a second connector mounted in the housing and affording a detachable connection to the electronic apparatus; and

a <u>pair of</u> fasteners [unit] incorporated in the connector unit <u>with said first connectors</u> <u>arranged therebetween</u>, <u>operable independently of each other to</u> detachably fix[ing] the housing to the electronic apparatus, the length of the housing with the fasteners [unit] incorporated therein being substantially equal to the overall length of the detachable connector unit.

- 2. (AS UNAMENDED) The detachable connector unit of claim 1, wherein the fastener unit comprises a threaded shaft for connecting the housing to the electronic apparatus, the threaded shaft projecting outwardly from a frontal surface of the detachable connector unit.
- 3. (ONCE AMENDED) A detachable connector unit for an electronic apparatus comprising:

a plurality of first connectors [for connecting] <u>affording connections</u> to respective peripheral units;

a second connector detachably connectable to the electronic apparatus; and

a <u>pair of fastener units</u>, <u>operable independently of each other to detachably fix[ing]</u> the detachable connector unit to the electronic apparatus, mounted in the vicinity of [a corresponding] <u>respective</u>, <u>spaced</u> end wall<u>s</u> of the detachable connector unit and <u>each having</u> an operating part projecting outwardly from a <u>corresponding</u> recess [of] <u>in</u> the [corresponding] respective end wall.

- 4. (ONCE AMENDED) The detachable connector unit of claim 3, wherein <u>each</u> said fastener [unit] comprises a threaded shaft projecting outwardly from a front surface of the detachable connector unit.
- 5. (ONCE AMENDED) The detachable connector unit of claim 4, wherein <u>each</u> said fastener [unit] further comprises a fastener housing, connected to the connector unit <u>and</u>

having an interior, and a coil spring within the interior urging the threaded shaft outwardly from the front[al] surface of the detachable connector unit.

7. (ONCE AMENDED) A detachable connector unit for an electronic apparatus, comprising:

a housing having front and rear surfaces and a height no greater than a thickness of the electronic apparatus;

a plurality of first connectors, accessible at the rear surface of the housing, [and] detachably connectable to respective peripheral units;

a second connector mounted on the front surface of the housing and detachably connectable to a mating, third connector mounted on a rear surface of the electronic apparatus by positioning the housing with the front surface thereof in parallel, spaced relationship with the rear surface of the electronic housing and with the second connector aligned with the mating, third connector and moving the housing in a direction toward the rear surface of the electronic housing so as to position the respective, parallel surfaces in contiguous relationship and thereby to connect the second and third connectors;

a <u>pair of fasteners</u> [fastening unit] mounted in the housing <u>with said first connectors</u> <u>arranged therebetween</u> and having [a] <u>respective</u> fastening shafts extending resiliently from, and transversely to, the front surface of the housing and disposed therein so as to be aligned with [a] <u>corresponding</u> mating [fastening unit] <u>fasteners</u> in the rear surface of the electronic apparatus, when the respective second and third connectors are aligned; and

the fastening shafts being resiliently biased by the <u>corresponding fasteners</u> [fastening unit] to project from the front surface of the housing and <u>being operable independently of each other</u> to contact and resiliently engage the <u>corresponding</u> mating [fastening unit] <u>fasteners</u> in the rear surface of the electronic apparatus and, by rotation of the fastening shafts, to be securely engaged therewith to maintain the contiguous relationship of the respective, parallel surfaces.

9. (ONCE AMENDED) The detachable connector unit of claim 7, wherein:

[the] each factoring shaft has a screw thread on at least a first portion thereof p

[the] <u>each</u> fastening shaft has a screw thread on at least a first portion thereof projecting from the front surface of the housing and an integral second portion extending into the [fastening unit] <u>fasteners</u>; and

the [fastening unit] <u>fastener</u> receives the second portion of the fastening shaft, resiliently biasing same to normally project from the front surface of the housing and to be retracted

therein, within a limited extent of axial movement of the fastening shaft.

- 10. (ONCE AMENDED) The detachable connector unit of claim 9, wherein [the] each fastening shaft furthermore has an enlarged disk disposed thereon, of a diameter greater than the diameter of the shaft and disposed so as to render an arcuate portion of the disk accessible through an opening in [an] the respective end wall of the housing for manual rotation by an operator.
- 11. (ONCE AMENDED) The detachable connector unit of claim 9, wherein:
  [the] each mating [fastening unit] fastener is a mating, female threaded unit receiving the threaded end of the respective fastening shaft.

Please ADD the following claims:

12. (NEW) A combination, comprising:

an electronic apparatus, comprising:

an apparatus housing having a surface defining a width of the apparatus housing and a height corresponding to a thickness of the housing, and

a common connector disposed in the surface; and a detachable connector unit for the electronic apparatus, comprising:

a connector housing having a corresponding width,

a plurality of first connectors mounted in the housing affording connections to respective peripheral units,

a second connector mounted in the housing and affording a detachable connection to the electronic apparatus, and

a pair of fasteners incorporated in the connector unit with said first connectors arranged therebetween, operable independently of each other to detachably fix the housing to the electronic apparatus, the length of the housing with the fasteners incorporated therein being substantially equal to the overall length of the detachable connector unit.

13. (NEW) The detachable connector unit of claim 12, wherein the fastener unit comprises a threaded shaft for connecting the housing to the electronic apparatus, the threaded

shaft projecting outwardly from a frontal surface of the detachable connector unit.

14. (NEW) A combination, comprising:

an electronic apparatus, comprising:

an apparatus housing having a surface defining a width of the apparatus housing and a height corresponding to a thickness of the housing, and

a common connector disposed in the surface; and a detachable connector unit for the electronic apparatus, comprising:

a connector housing having a corresponding width,

a plurality of first connectors affording connections to respective peripheral units,

a second connector detachably connectable to the electronic apparatus, and

a pair of fastener units, operable independently of each other to detachably fix the detachable connector unit to the electronic apparatus, mounted in the vicinity of respective, spaced end walls of the detachable connector unit and each having an operating part projecting outwardly from a corresponding recess in the respective end wall.

- 15. (NEW) The detachable connector unit of claim 14, wherein each said fastener comprises a threaded shaft projecting outwardly from a front surface of the detachable connector unit.
- 16. (NEW) The detachable connector unit of claim 15, wherein each said fastener further comprises a fastener housing, connected to the connector unit and having an interior, and a coil spring within the interior urging the threaded shaft outwardly from the front surface of the detachable connector unit.
  - 17. (NEW) A combination, comprising:

an electronic apparatus, comprising:

a connector housing having a surface defining a width of the housing and a height corresponding to a thickness of the housing and a corresponding width, and

a common connector disposed in the surface; and

a detachable connector unit for the electronic apparatus, comprising:

a housing having front and rear surfaces and a height no greater than a

thickness of the electronic apparatus,

a plurality of first connectors, accessible at the rear surface of the housing, detachably connectable to respective peripheral units,

a second connector mounted on the front surface of the housing and detachably connectable to a mating, third connector mounted on a rear surface of the electronic apparatus by positioning the housing with the front surface thereof in parallel, spaced relationship with the rear surface of the electronic housing and with the second connector aligned with the mating, third connector and moving the housing in a direction toward the rear surface of the electronic housing so as to position the respective, parallel surfaces in contiguous relationship and thereby to connect the second and third connectors,

a pair of fasteners mounted in the housing with said first connectors arranged therebetween and having respective fastening shafts extending resiliently from, and transversely to, the front surface of the housing and disposed therein so as to be aligned with corresponding mating fasteners in the rear surface of the electronic apparatus, when the respective second and third connectors are aligned, and

the fastening shafts being resiliently biased by the corresponding fasteners to project from the front surface of the housing and being operable independently of each other to contact and resiliently engage the corresponding mating fasteners in the rear surface of the electronic apparatus and, by rotation of the fastening shafts, to be securely engaged therewith to maintain the contiguous relationship of the respective, parallel surfaces.

- 18. (NEW) The detachable connector unit of claim 17, wherein:
- each fastening shaft has a screw thread on at least a first portion thereof projecting from the front surface of the housing and an integral second portion extending into the fasteners; and

the fastener receives the second portion of the fastening shaft, resiliently biasing same to normally project from the front surface of the housing and to be retracted therein, within a limited extent of axial movement of the fastening shaft.

19. (NEW) The detachable connector unit of claim 18, wherein each fastening shaft furthermore has an enlarged disk disposed thereon, of a diameter greater than the diameter of the shaft and disposed so as to render an arcuate portion of the disk accessible through an

opening in the respective end wall of the housing for manual rotation by an operator.

20. (NEW) The detachable connector unit of claim 18, wherein:
each mating fastener is a mating, female threaded unit receiving the threaded end of the respective fastening shaft.